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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,461	02/01/2002	Ichiro Kubota	450101-03584	9479

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EXAMINER	
SHANG, ANNAN Q	

ART UNIT	PAPER NUMBER
2623	

MAIL DATE	DELIVERY MODE
06/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/937,461	KUBOTA ET AL.	
	Examiner	Art Unit	
	Annan Q. Shang	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/01/07 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-5 and 7-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sie et al (6,973,662)** in view of **Huizer et al (5,875,303)** and further in view of **McMahon (7,020,195).**

As to claim 1, note the **Sie** reference figures 3-5 and 12-14, discloses method for providing programming distribution and further discloses a data transmission system for distributing predetermined data through transmission paths, the data transmission system comprising:

A data transmitting apparatus (figs.3 and 4, every element on the left of the network, i.e., 116, 124, 128, 132, 136 and 304 or 404, Headend 'HE', col.3, line 56-col.4, line 21 and col.19, lines 16-37) including data supply means for supplying the data (128, 132 and 136), transmission control means (SMS-124) for dividing the data (MPEG-2 or different algorithms such as MPEG-4, data files, movie content, etc.) supplied by the data supply means into a predetermined number of data files to distribute the divided divisional data files, and data transmitting means (SMS-124) for transmitting each of the distributed divisional data files respectively through a predetermined transmission path/paths which are different from each other (via different channels and different network, col.5, lines 5-18, col.7, lines 3-12, col.14, line 4-col.15, line 47) and where the data files are restored by synthesis, note that the data file(s), movies or video program is staggered among various channels and distributed in real-time via satellite on different transponders or via other communication network and once a viewer begins watching a portion of the data, movie, etc., the rest the data, movie, etc., is retrieved via combination of different channels or networks, satellite, cable, optical fiber and other broadband networks; and

A data receiving apparatus (STB 120/412 figs.4-6, or Receiver 1100, 1200, etc., figs.11-16) including data receiving means (Program Receiver/ Program Server) for receiving the divisional data files transmitted through the predetermined transmission paths, data receiving control means (Controller or Control Circuit) for restoring by synthesizing the plurality of the plurality of the received divisional data files, transmitted via different channels, transponders, etc., of the different networks, into original data or

MPEG file(s), and data output means for outputting the restored data (figs.11, 12, col.14, line 56-col.15, line 35 and col.17, line 43-col.18, line50).

Sie fails to explicitly teach where the data transmitting apparatus stores the distributed divisional data files in a private section of a respective transport stream and where the data receiving apparatus extracts the divisional data files from the private section of the transport stream.

However, note the **Huizer** reference figures 1-6, discloses method and arrangement for transmitting an interactive audiovisual (AV) program where a Server (1) stores sectors of AV program in the private section of the transport stream and a Receiver (2), which extracts the sectors from the transport stream and reassembles the sectors accordingly (col.1, line 61-col.2, line 24, line 40-col.3, line 1+ and col.5, line 61-col.6, line 10).

Therefore it would have been obvious to one of ordinary skilled in the art at the time of the invention to incorporate the teaching of Huizer into the system of Sie in order to encode different parts of AV program or multimedia in the private section of the transport stream and comply with the MPEG standard.

Sie as modified by Huizer, fail to explicitly teach where the divisional data files can be restored into original data when a predetermined number of packets are removed by the receiving apparatus from a group of packets generated by the data transmitting apparatus.

However, note the **McMahon** reference figures 5-11, discloses layered coding and decoding of image data where divisional data files can be restored into original data

when a predetermined number of packets are removed by the receiving apparatus from a group of packets generated by the data transmitting apparatus (fig.9, col.4, lines 14-37, col.10, lines 10-33 and col.11, line 36-col.12, line 29).

Therefore it would have been obvious to one of ordinary skilled in the art at the time of the invention to incorporate the teaching of McMahon into the system of Sie as modified by Huizer to enable various types of receivers, based on their processing capabilities, to reconstruct the original image data with a minimum or a portion of divisional data received.

As to claim 2, Sie further discloses where the data transmission system where the data supply means stores data files generated in advance, to deliver the stored data files as occasion demands (col.3, lines 66-col.4, line 13 and col.14, line 19-29).

As to claim 3, Sie further discloses where the data supply means supplies data generated in real time (col.3, lines 66-col.4, line 13 and col.14, line 19-29).

Claim 4 is met as previously discussed with respect to claim 1.

As to claim 5, Sie further discloses where the transmission control means of the data transmitting apparatus divides the data in units of predetermined transmission frame to distribute each of the divisional data files respectively to the data transmitting means (figs.9A-9C and col.14, line 4-col.15, line 35).

As to claim 7, Sie further discloses where each of the transmission paths is formed by a plurality of transponders mounted in satellite (col.5, lines 38-48 and line 60-col.6, line 2).

As to claim 8, the claimed "A data transmitting apparatus for transmitting predetermined data through transmission paths..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 9, the claimed "A data receiving apparatus for receiving predetermined data through transmission paths..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 10, the claimed "A data transmitting method for distributing predetermined data through transmission paths..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 11, the claimed "A data transmission system for transmitting moving picture data files through a transmission paths..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 12, the claimed "A data transmitting apparatus for transmitting moving picture data files through a transmission paths..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 13, the claimed "A data receiving apparatus for receiving predetermined data through transmission paths..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 14, the claimed "A data transmitting method for transmitting moving picture data files through transmission paths..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 15, the claimed "A data transmission system for transmitting movie contents files through satellite transponders..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 16, the claimed "A data transmitting apparatus for transmitting movie content files through satellite transponders..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 17, the claimed "A data receiving apparatus for receiving movie content files through satellite transponders..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

As to claim 18, the claimed "A data transmission method for transmitting movie contents files through satellite transponders..." is composed of the same structural elements that where discussed with respect to the rejection of claim 1.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Sie et al (6,973,662)** in view of **Huizer et al (5,875,303)** and further in view of **McMahon (7,020,195)** as applied to claim 1 above, and further in view of **Payton (5,831,662).**

As to claim 6, Sie as modified by Huizer and McMahon, teach where the data transmitting means of the data transmitting apparatus further detects a state as to whether the transmission path connected to the transmitting means can be used or not, and transmits the detected state serving as transmission path information to the transmission control means (Sie, col.7, lines 5-18, col.7, lines 3-12, col.14, line 47-55, line 65-col.15, line 35), but fail to explicitly teach where the transmission control means of the data transmitting apparatus further collects the transmission path information to

calculate a number of usable transmission paths to divide the data in correspondence the calculated number to distribute each of the divisional data files respectively to the usable data transmitting means.

However, not the **Payton** reference discloses a near on-demand delivery system, which collects the transmission path information to calculate a number of usable transmission paths to divide the data in correspondence the calculated number to distribute each of the divisional data files respectively to the usable data transmitting means (col.3, lines 23-col.5, line 5 and line 64-col.6, line 67).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Payton into the system of Sie as modified by Huizer and McMahon to determine the minimum number of available paths, channels, networks, etc., that can be used to transmit the various data fragments.

Response to Arguments

5. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection. The amendment to all the independent claims necessitated the new ground(s) of rejection discussed above. **This office action is non-final.**

Conclusion

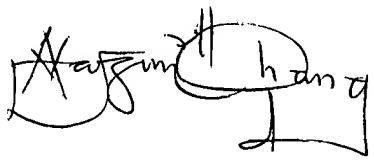
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tillman et al (6,496,980) disclose method of providing replay on demand for streaming digital multimedia.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, **call 800-786-9199 (IN USA OR CANADA) or 571-272-1000**.



Annan Q. Shang